8pp

OPPT-2002-0060-0015

INITIAL REVIEW EXPOSURE REPORT	P-98-1125	Page 1 of: 8
Assessor: POWERS / Anderson	Search ( )Y	Focus Date: 09/07/98
SAT Health: L-M		Focus Rep: MKP
SAT Eco: H		SAT Rep: GT
Submitter:	Max. PV (kg/yr)	Manuf. X / Import
Use:		
Consumer Exposure	(X)no,	
	( )yes, see consumer exp. page	
Analogs/Comments		
Chemical Name:		
Trade Name:	CAS:	
Structure:		

INITIAL REVIEW EXPOSURE REPORT			P-98-1125	Page 2 of: 8
STATE	NEAT	Solid (est)		EPI ESTIMATIONS
	MFG	Solution, in benzyl alcohol		
FORMULA		% < 500		
MOL WT		% < 1000		

PROPERTY	Submitted	ICB-CRSS	Method/Ref	
MP (C)				
BP (C)		@ 760 torr		@ 760 torr
@ P (torr)				
VP (torr)		<0.000001	Est	
S-H2O (g/L)		>100	Est	mg/L
S-Org (g/L)				mg/L
Log Kow				
pH, pKa			Log Koc	
Light Absorption (nm)	< > 290		Log BCF / BCF	
Solvent:			H (atm m3/mol)	

HYDRO t(1/2) @ pH 7, 25 C		da	Persistence / Bioaccumulation	P3 B1			
Volatilization (H2O) t(1/2)		River		hr	Lake		da
AOP t(1/2) (hr)	OH		O3		Total		
BIODEG	Linear Prob:	Nonlinear Prob:	Survey Ult:	Survey Prim:			
STP (% Removal)	Tot		Biod		Ads		Air

REMOVAL IN WWT/POTW	% Overall		0	25	50	(75)	(90)	=> 99
			CATEGORY					
		RATING	1	2	3	4		
Sorption			low	(moderate)	(strong)	v.strong		
Stripping			extensive	moderate	low	(negligible)		
Biodegradation	Removal		unknown	high	moderate	(negligible)		
	Destruction		unknown	complete	partial			

Comments:

AEROBIC BIODEGRADATION	Ultimate		<= days	weeks	months	(> months)
	Primary		<= days	weeks	months	> months

Comments:

INITIAL REVIEW EXPOSURE REPORT			P-98-1125			Page 3 of: 8
				CATEGORY			
		RATING	1	2	3	4
ANAEROBIC BIODEGRADATION	Ultimate		<= days	weeks	months	> months
	Primary		<= days	weeks	months	> months
Comments:						
	HYDRO (da)					
HYDROLYSIS	A.		<= mins	hours	days	=> months
(t(1/2) @ pH 7, 25 C)	B.		<= mins	hours	days	=> months
Comments:						
SORPTION TO SOIL & SEDIMENT			v.strong	strong	moderate	low
Comments:						
MIGRATION TO GROUND WATER			negl	slow	moderate	rapid
Comments:						
VOLATILIZATION	Rivers (hr)		negl	slow	moderate	rapid
(t(1/2) w/o sediment	Lakes (da)		negl	slow	moderate	rapid
Comments:						
PHOTOLYSIS	A. Direct		negl	slow	moderate	rapid
	B. Indirect		negl	slow	moderate	rapid
Comments:						
	AOP t(1/2) hr					
ATMOSPHERIC	A. OH		negl	slow	moderate	rapid
OXIDATION	B. O3		negl	slow	moderate	rapid
Comments:						

CASE NUMBER(S): P-98-1125 ASSESSOR:

ENVIRONMENTAL RELEASES

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RELEASE ID#: 1 Number of Release Sites: 1
RELEASE ACTIVITY: (X)MFG ( )PRO ( )IND USE ( )COMM USE ( )CONS USE

RELEASE DESCRIPTION:	WATER	LANDFILL	INCINER	LAND/INCIN	FUGITIVE
Total Releases:		0.00		0.00	0.00
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)
Release Days/yr:					0
Per Site Release:		0.00		0.00	0.00
	(kg/day)	(kg/yr)	(kg/yr)	(kg/yr)	(kg/day)

REMARKS: Incineration release is less than trigger of 200 kg/site/yr after 99.9% destruction.

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RELEASE ID#: 2 Number of Release Sites: 1
RELEASE ACTIVITY: ( )MFG (X)PRO ( )IND USE ( )COMM USE ( )CONS USE

RELEASE DESCRIPTION:	WATER	LANDFILL	INCINER	LAND/INCIN	FUGITIVE
Total Releases:	1300.00	0.00	5.00e+04	0.00	0.00
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)
Release Days/yr:	10				0
Per Site Release:	130.00	0.00	5.00e+04	0.00	0.00
	(kg/day)	(kg/yr)	(kg/yr)	(kg/yr)	(kg/day)

REMARKS : Incineration release is less than trigger of 200 kg/site/yr after 99.9% destruction.

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RELEASE ID#: 3 Number of Release Sites: 30
RELEASE ACTIVITY: ( )MFG ( )PRO (X)IND USE ( )COMM USE ( )CONS USE

RELEASE DESCRIPTION:	WATER	LANDFILL	INCINER	LAND/INCIN	FUGITIVE
Total Releases:	1950.00	0.00	5.00e+04	0.00	0.00
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)
Release Days/yr:	50				0
Per Site Release:	1.30	0.00	1666.67	0.00	0.00
	(kg/day)	(kg/yr)	(kg/yr)	(kg/yr)	(kg/day)

REMARKS : Incineration release is less than trigger of 200 kg/site/yr after 99.9% destruction.

CASE NUMBER(S): P-98-1125

AQUATIC EXPOSURES FROM RELEASES TO LAKES, BAYS, ESTUARIES AND OCEANS

RELEASE ID#: 1

RELEASE ACTIVITY: (X)MFG ( )PRO ( )IND USE ( )COMM USE ( )CONS USE

Facility Name:

Facility Location:

Receiving Water Name:

Reach Number:

Facility on Reach? [X] Yes [ ] No

Discharge Type: [X] Direct [ ] Indirect

NPDES Permit # (for indirects, use POTW permit #)

Data Source:
[ ] Task 73
[ ] IFD
[ ] Submitter
[ ] Contractor
[ ] Region/State
[X] Other SIDS/Direct

Removal in Wastewater Treatment: 75.000 % - 90.000 %
Plant Effluent Flow (MLD): 1415.590

Release (kg/site/day):
(before treatment) (after treatment)

Bio Concentration Factor : 0.000
Fish ingested (grams/day): 2.000
Release days/yr: 2

	MIXING ZONE DILUTION FACTOR	SURFACE WATER WATER (ug/l)*	FISH INGEST PDR*
ACUTE		0.53	0.00
CHRONIC		0.53	0.00

*Where, SURFACE WATER CONC. = [Pollutant loading after treatment/ Plant effluent flow (MLD)] * 1000/Critical dilution factor)

FISH ING PDR = (mean stream conc) X (Bio Concentration Factor) X (fish ingested/day) X (release days/yr) X (1.0e-6)

REMARKS : COC = 10 ppb and is not exceeded. Acute dilution factor of 166 used as a conservative substitute for chronic dilution factor to use model because this factor unavailable in SIDS or Task 73.

1 MGD = 3.7854 MLD

CASE NUMBER(S): P-98-1125

SIC-CODE BASED HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

RELEASE ID#: 2

RELEASE ACTIVITY: ( )MFG (X)PRO ( )IND USE ( )COMM USE ( )CONS USE

RELEASE ACTIVITY SIC CODE(S):

SIC CODE DESCRIPTION:

Removal in Wastewater Treatment: 75.000 % - 90.000 %
Bio Concentration Factor : 0.000
Release (kg/site/day): 130.000 (before treatment) 32.500 (after treatment)

Release days/yr: 10

Water ingested (liters/day) : 2.000

Fish consumed (grams/day) : 16.900

PLANT TYPE	% TILE	STREAMFLOW (MLD) MEAN	STREAMFLOW (MLD) LOW	STREAM CONC (UG/L) MEAN	STREAM CONC (UG/L) LOW	HUMAN PDRs (MG/YR) WATER	HUMAN PDRs (MG/YR) FISH *
All	50	3635.98	355.79	8.94	91.35	0.18	0.00
All	10	123.82	16.02	262.48	2028.71	5.25	0.00

*Where, STREAM CONC = [(Release after treatment) X (1000)] / (Streamflow)
DRINKING WATER PDR = (Mean stream conc) X (water ingested/day) X (Release days/yr) X (0.001)
FISH INGESTION PDR = (Mean stream conc) X (Bio Concentration Factor) X (fish ingested/day) X (Release days/yr) X (1.0 E-6)

REMARKS : COC = 10 ppb and is exceeded. Releases occur less than 20 days per year. No BCF reported.

1 CFS = 2.4465 MLD 1 MGD = 3.7854 MLD

CASE NUMBER(S): P-98-1125

SIC-CODE BASED HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

RELEASE ID#: 3

RELEASE ACTIVITY: ( )MFG ( )PRO (X)IND USE ( )COMM USE ( )CONS USE

RELEASE ACTIVITY SIC CODE(S): 4952

SIC CODE DESCRIPTION: POTW (Indust., includes POTWs which receive ind. disch.).

Removal in Wastewater Treatment: 75.000 % - 90.000 %
Bio Concentration Factor : 0.000
Release (kg/site/day): 1.300 (before treatment) 0.325 (after treatment)

Release days/yr: 50

Water ingested (liters/day) : 2.000

Fish consumed (grams/day) : 16.900

PLANT TYPE	% TILE	STREAMFLOW (MLD) MEAN	STREAMFLOW (MLD) LOW	STREAM CONC (UG/L) MEAN	STREAM CONC (UG/L) LOW	HUMAN PDRs (MG/YR) WATER	HUMAN PDRs (MG/YR) FISH *
All	50	824.23	78.74	0.39	4.13	3.94e-02	0.00
All	10	112.79	7.57	2.88	42.93	0.29	0.00

*Where, STREAM CONC = [(Release after treatment) X (1000)] / (Streamflow)
DRINKING WATER PDR = (Mean stream conc) X (water ingested/day) X (Release days/yr) X (0.001)
FISH INGESTION PDR = (Mean stream conc) X (Bio Concentration Factor) X (fish ingested/day) X (Release days/yr) X (1.0 E-6)

REMARKS : COC = 10 ppb and is exceeded 18 days/yr. No BCF reported.

1 CFS = 2.4465 MLD 1 MGD = 3.7854 MLD

PDM EXPOSURE REPORT Page 8 of 8

CASE(s) : P-98-1125

SIC CODE-BASED PROBABILISTIC DILUTION MODEL (PDM) RESULTS
FOR FACILITY IN POTWs (Industrial) (4952)
High-end Case Scenario

Release ID# : 3

Release Activity: ( )MFG ( )PRO (X)IND USE ( )COMM USE ( )CONS

Release Activity SIC Code (s) : 4952

SIC Code Description : Indus. POTW

Number of Release Sites : 30

Removal in Wastewater Treatment (Percent) : 75-90 %

	DIRECT	INDIRECT	ALL
10th %tile Mean Streamflow (MLD) :			
10th %tile Low Streamflow (MLD) :			
10th %tile Effluent Streamflow (MLD) :			

RELEASE DAYS/YR	AMOUNT RELEASED (kg/site/day)	CONCERN CONC. (ug/l)	PERCENT OF YEAR EXCEEDED*	DAYS PER YEAR EXCEEDED
50	0.33	10.00000	4.69	17.11

* 'PERCENT OF YEAR EXCEEDED' is obtained by dividing the 'DAYS PER YEAR EXCEEDED' by 365 days/yr.

Remarks: